Appendix B. Comparison of Potential Emissions from Waste Combustion with 40 CFR 60 Subpart DDDD Limits.

Pollutant	Emission Limit at 7% O2	Units	Haas Cabinet Potential Emissions	HomeCrest Potential Emissions	Maxon Potential Emissions	Mead Johnson Potential Emissions	Ampcor11 Potential Emissions	SpringsValley Potential Emissions	GE Plastics Potential Emissions	Emission Factor (lb/ton)
Design Capacity (lb/hr)			95	250	625	250	150	300	8000	
PM	70	mg/dscm	87	228	570	228	137	274	30	7.00 E+00[1]
SO2	20	ppm_{vd}	12	31	76	31	18	37	0.3	2.5 E+00[1]
NOx	388	ppm_{vd}	19	51	128	51	31	61	128.5	3.0 E+00[1]
CO	157	ppm_{vd}	106	280	699	280	168	336	85.6	1.00 E+01[1]
HCl	62	ppm_{vd}	274	720	1800	720	432	864	NA	3.35 E+01[2]
Pb	0.04	mg/dscm	1	2	6	2	1	3	NA	7.28 E-02[3]
Hg	0.47	mg/dscm	1	3	9	3	2	4	NA	1.07 E-01[4]
Cd	0.004	mg/dscm	0.07	0.18	0.45	0.18	0.11	0.21	NA	5.48 E-03[5]
Dioxin/ Furans	0.41 TEQ	ng/dscm	1	2	4	2	1	2	2.0E-04	2.55 E-07[6]

Note: Assumptions for lb/hr conversion to mg/dscm or ppmvd units: 1600 dscf/min and 12%O2. Since information was not available for these units the average dscf and %O2 from medical waste incinerator stack tests was used as an estimate for these incinerators.

[1] - Emission factor from Table 2.1-12, Uncontrolled Emission Factors for Refuse Combustors other than Municipal Waste, U.S. EPA AP-42 Volume 1 5th Edition Supplement B Chapter 2.1, Refuse Combustion, October 1996.
[2] - Emission factor from Table 2.3-3, Emission Factors for Hydrogen Chloride (HCl) and Polychlorinated Biphenyls (PCBs) for Controlled Air Medical Waste Incinerators, U.S. EPA AP-42 Volume 1 5th Edition Chapter 2.3, Medical Waste Incineration, July 1993.
[3] - Emission factor from Table 2.3-2, Emission Factors for Total Particulate Matter, Lead, and Total Organic Compounds (TOC) for Controlled Air Medical Waste Incinerators, U.S. EPA AP-42 Volume 1 5th Edition Chapter 2.3, Medical Waste Incineration, July 1993.
[4] - Emission factor from Table 2.3-7, Emission Factors for Manganese, Mercury, and Nickel for Controlled Air Medical Waste Incinerators, U.S. EPA AP-42 Volume 1 5th Edition Chapter 2.3, Medical Waste Incineration, July 1993.
[5] - Emission factor from Table 2.3-5, Emission Factors for Barium, Beryllium, and Cadmium for Controlled Air Medical Waste Incinerators, U.S. EPA AP-42 Volume 1 5th Edition Chapter 2.3, Medical Waste Incineration, July 1993.
[6] - Emission factor from Table 2.3-11, Emission Factors for Chlorinated dibenzo-p-dioxin for Controlled Air Medical Waste Incinerators, U.S. EPA AP-42 Volume 1 5th Edition Chapter 2.3, Medical Waste Incineration, July 1993. Emission factor for 2,3,7,8-TCDD was selected to compare to the emission limit in TEQ (toxic equivalency basis), since the TEQ for 2,3,7,7-TCDD is large compared to the other species.

*GE Plastics - Liquid Waste Incinerator - AP 42 Emission Factors are not available for a liquid waste incinerator, emission factors from air permit are used. NA = Not applicable based on process knowledge. Emissions estimates represent emissions from both waste and natural gas fuel combustion.